

*Sokolova N.I.*

AUTHORS: Shabarova, Z. A., Sokolova, N. I.,  
Prokof'yev, M. A. 79-11-26/56

TITLE: Aminoacyl Derivatives of Nucleosides (Aminoatsil'nyye  
proizvodnyye nukleozidov).

II. Structure and Properties of the Aminoacyl- and Peptide-  
Derivatives of  $\beta$ -d-glucopyranosylcytosine (II. Struktura  
i svoystva aminoatsil'nykh i peptidnykh proizvodnykh  $\beta$ -d-  
glyukopiranozilsitozina).

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 11,  
pp. 3028-3034 (USSR)

ABSTRACT: The synthesis of the aminoacyl- and peptide-derivatives of  
 $\beta$ -d-glucopyranosylcytosine was earlier described by the  
authors. But the formula ascribed to the and products was set  
up rather arbitrarily. Supplementary investigations were  
needed for determining the correct structure. Besides the  
authors considered it necessary in examining the aminacyl-  
and peptide-derivatives of the nucleosides, as possible  
fragments of the nucleoproteins, to investigate the properties  
of the obtained compounds more thoroughly, especially also  
the hydrolysis of the amido-bond. They attempted to determine  
the structure of the obtained products spectroanalytically by

Card 1/3

Aminoacyl Derivatives of Nucleosides.

79-11-26/56

II. Structure and Properties of the Aminoacyl- and Peptide-Derivatives of  $\beta$ -d-glucopyranosylcytosine

comparison. It was shown that  $N_c$ -aminoacyl- and  $N_c$ -peptide-derivatives of nucleoside form in the reaction of the aminoacylation of cytosine-nucleoside with mixed anhydrides of kbs-amino acids and kbs-peptides. The amido-bond in the  $N_c$  - kbs - aminoacyl- and  $N_c$  - kbs - peptide-derivatives of cytosinenucleoside is to be influenced by hydrolysis of water not at all, by acid hydrolysis with difficulty and only by alkali easily. There exists a dependence of the duration of hydrolysis on the character of the aminoacyl residue which forms the amido-bond.

There are 5 figures, 2 tables, and 4 references, 2 of which are Slavic.

Card 2/3

Aminoacyl Derivatives of Nucleosides.  
II. Structure and Properties of the Aminoacyl- and  
Peptide-Derivatives of 3- $\beta$ -d-glucopyranosylcytosine

79-11-26/56

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy  
universitet)

SUBMITTED: October 9, 1956

AVAILABLE: Library of Congress

1. Nucleosides - Aminoacyl derivatives      2. 3- $\beta$ -d-  
glucopyranosylcytosine - Derivatives

Card 3/3

SOV/79-29-2-40/7:

AUTHORS: Shabarova, Z. A., Sokolova, N. I., Prokof'yev, M. A.

TITLE: Aminoacyl Derivatives of Nucleosides (Aminoatsil'nyye proizvod-nyye nukleozidov). IV. Synthesis of  $N_6$ -Polypeptide Derivatives of 3- $\beta$ -d-Glucopyranosyl Cytosine According to the "Carbodi-imide" Method (IV. Sintez  $N_6$ -polipeptidnykh proizvodnykh 3- $\beta$ -d-glyukopiranoziltsitozina "karbodiimidnym" metodom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 539-544 (USSR)

ABSTRACT: The yields of aminoacyl nucleosides by aminoacylation of cytosine nucleoside according to references 1,2 amounted only to 50%. Much better results are obtained according to the "carbodiimide" method (Ref 3). It consists in the aminoacylation of the active amine group with an amino acid or a peptide in the presence of an  $N,N'$ -diaryl carbodiimide. This method has a great advantage over that mentioned above by which the peptide bond is synthesized with mixed anhydrides of amino acids. However, the latter are very unstable. The aminoacylation with amino acids and peptides in the presence of carbodiimide takes place in humid medium (even in water) at room temperature.

Card 1/2

SOV/79-29-2-40/7:

Aminoacyl Derivatives of Nucleosides. IV. Synthesis of  $N_6$ -Polypeptide Derivatives of 3- $\beta$ -D-Glucopyranosyl Cytosine According to the "Carbodimide" Method

Besides, it is more favorable to introduce the free amino acid rather than their active derivatives.  $N,N'$ -dicyclohexyl carbodiimide was used as condensing agent (Ref 4) (Scheme 1). Thus, the yield of  $N_6$ -kbz-glycyl-3- $\beta$ -D-tetraacetyl glucopyranosyl cytosine was increased from 34 to 55% and that of  $N_6$ -kbz-phenyl-alanyl-3- $\beta$ -D-tetraacetyl glucopyranosyl cytosine was increased from 55 to 81%. The polypeptide derivatives of the cytosine nucleoside can be synthesized from monocaminoacyl nucleosides as well (Scheme 2). The monocaminoacyl nucleosides with a free amino group used in these syntheses were obtained by reduction according to scheme 3. There are 3 tables and 5 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: November 5, 1957

Card 2/2

5(3)

AUTHORS:

Shabarova, Z. A., Sokolova, N. I.,  
Boykova, L. A., Prekof'yev, M. A. SOV/79-29-9-23/76

TITLE:

Aminoacyl Derivatives of Nucleosides.  
V. Synthesis of  $N_6$ -Aminoacyl- and  $N_6$ -Peptide Derivatives  
of Cytidine

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 9, pp 2917-2922  
(USSR)

ABSTRACT:

In continuation of their earlier research work (Ref 1) the authors deal here with the synthesis of cytidine ( $\beta$ -D-ribofuranosylcytosine) and its  $N_6$ -aminoacyl- and  $N_6$ -peptide derivatives. The so-called "carbodiimide method" is, as already previously shown, the most convenient method of synthesizing  $N_6$ -aminoacyl- and  $N_6$ -peptide derivatives of cytosine nucleoside. Its application to the synthesis of aminoacyl derivatives of cytidine made it possible to use in this reaction a nucleoside with non-substituted oxy-groups of saccharide, since no aminoacetylation of the oxy-groups takes place under these conditions (Ref 6) (reaction scheme). Table 1 gives yields and constants of the synthesized

Card 1/3

## Aminoacyl Derivatives of Nucleosides.

SOV/79-29-9-23/76

V. Synthesis of  $N_6$ -Aminoacyl- and  $N_6$ -Peptide Derivatives  
of Cytidine

derivatives of cytidine. Thus, kbz-phenyl alanyl cytidine (yield 90%) resulted from the acylation of cytidine with phenyl alanine (kbz-phenyl alanine). Its ultraviolet absorption spectrum is equal to that of another well-known cytosine derivative (Ref 7) so that its structure is known; aminoacylation of cytidine proceeds also on the amino group under the formation of the  $N_6$ -aminoacyl- and  $N_6$ -peptide derivative of cytidine with various amino acids (serine, tyrosine, cysteine, lysine) which contain also other functional groups apart from the  $\alpha$ -amino group. The aminoacyl derivatives of 3- $\beta$ -D-glucopyranosyl cytosine were synthesized in the same way (Table 2). As the various  $N_6$ -aminoacyl derivatives obtained from cytosine nucleosides differ in the structure of the amino acid which forms the amide bond, or in the structure of the saccharide, the effect of these components on the hydrolytic stability of the amide bond was investigated. Table 3 shows the results of the hydrolysis of  $N_6$ -aminoacyl derivatives of cytidine and 3- $\beta$ -D-glucopyranosyl

Card 2/3

Aminoacyl Derivatives of Nucleosides.

SOV/79-29-9-23/76

V. Synthesis of  $N_6$ -Aminoacyl- and  $N_6$ -Peptide Derivatives  
of Cytidine

cytosine, containing the same amino acids and peptides, and, for comparison, also the data on the hydrolytic stability of the amide bond in the  $N_6$ -aminoacyl-3- $\beta$ -D-tetraacetyl glucopyranosyl cytosine. The hydrolytic stability of the amide bond in the above compounds was found to depend on the nature of the hydrolyzing carbohydrate which forms part of the nucleoside, as well as on the nature of the aminoacyl residue. There are 3 tables and 8 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 19, 1958

Card 3/3

5 (3), 17 (3)

AUTHORS: Shabarova, Z. A., Sokolova, N. I.,  
Prokof'yev, M. A. SOV/20-128-4-29/65

TITLE: Peptide Synthesis by Means of Aminoacyl Derivatives of  
Nucleosides

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 740 - 743  
(USSR)

ABSTRACT: The compounds of nucleotides and ribonucleic acid (RNS) with  
amino acids are poorly investigated (Ref 2) in spite of their  
great importance for protein biosynthesis (Ref 1). In the  
present paper, some O- and N-aminoacyl derivatives of nucleo-  
sides formed as intermediates in the protein biosynthesis were  
synthesized and studied. The authors tried, above all, to  
clarify the ability of such compounds for a peptide synthesis  
(i.e. for the amino acylation of free amino groups of amino  
acids or peptides). 2 types of aminoacyl nucleosides: O-carbo-  
benzoxy-phenyl-alanine derivatives of adenosine (type I) and  
N<sub>6</sub>-aminoacyl derivatives of cytidine (type II), were investi-  
gated. The aminoacylating ability of the said synthesized sub-  
stances (I) and (II) was studied under almost natural conditions

Card 1/3

.Peptide Synthesis by Means of Aminoacyl Derivatives of SOV/20-128-4-29/65  
Nucleosides

namely in the presence of a ferment - chymotrypsine - at room temperature and at pH 8 (phosphate buffer solution). It was shown that both (I) and (II) easily react with the free amino group to form a new peptide bond. Table I shows a list of peptides which are formed by the effect of (I) and (II) on glycine-ethyl ester. Under the same conditions, but without a ferment, no peptide synthesis was observed. Only in one case - in the reaction of IIa (see Scheme) with glycine ester - traces of phenyl-alanine-glycine are formed, even without any chymotrypsine. The peptide formation from (I), (II) and the glycine ester also takes place without any ferment, but under harder conditions (by boiling in benzene). The above results indicate a high reactivity of the O- and N-aminoacyl derivatives of nucleosides. This suggests the possible participation of such compounds in the synthesis of the peptide bond. There are 1 table and 6 references, 3 of which are Soviet.

Card 2/3

Peptide Synthesis by Means of Aminoacyl Derivatives of Nucleosides SOV/20-126-4-29/65

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: May 22, 1959, by A. N. Nesmeyanov, Academician

SUBMITTED: May 17, 1959

Card 3/3

KOKLOVA, N. I., Cand Chem Sci (diss) -- "The synthesis and properties of  
N<sub>1</sub>-aminoacyl derivatives of the pyrimidine nucleosides". Moscow, 1960.  
12 pp (Moscow State U im M. V. Lomonosov, Chem Faculty), 120 copies (KL, No 11,  
1960, 129)

SOKOLOVA, N.I.; BAKANOVA, V.A.; SHABAROVA, Z.A.; PROKOF'YEV, M.A.

Isolation of pyrimidine deoxyribonucleosides and the production  
of their aminoacyl derivatives. Biokhimiia 27 no.6:1079-1084  
N.D. '62. (MIRA 17:5)

1. Laboratoriya khimii belka Gosudarstvennogo universiteta imeni  
Lomonosova, Moskva.

SOKOLOVA, N.I.; BAKANOVA, V.A.; SHABAROVA, Z.A.; PROKOF'YEV, M.A.

Aminoacyl derivatives of nucleosides. Part 6: Synthesis and properties of aminoacyl derivatives of deoxyribonucleosides. Zhur. ob. khim. 33 no.8:2480-2486 Ag '63. (MIRA 16:11)

PREOBRAZHENSKAYA, N.N.; SOKOLOVA, N.I.; SHABAROVA, Z.I.; PROKOF'YEV, M.A.

Synthesis and properties of methyl ester of polyuridylyl-  
(5'→N)-phenylalanine. Khim. prirod. soed. no.5:342-347 '65.  
(MIRA 18;12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.  
Submitted May 25, 1965.

SOKOLOVA, N.Z., agronom.

Experience using 30 watt fluorescent lamps in vegetable raising.  
Svetotekhnika 3 no. 32-37 v '57. (MLRA 10:9)

I. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva.  
(Fluorescent lamps) (Greenhouses)

SURVEY, P.R.S.

Sci. Res. Inst. of Vegetable Cultivation

SOKOLOVA, N. K.: Master Agric Sci (diss) -- "The Klin multiple cucumber with various means of improving the planting and formation of the plants". Moscow, 1959. 17 pp (Moscow Order of Lenin Agric Acad im K. A. Timiryazev), 110 copies (KL, № 4, 1959, 129)

SOKOLOVA, N. K.

"Investigation of the Methods and Determination of the Rational Organization of the Operation of High-Frequency Tempering Machines." Cand Tech Sci, Moscow Order of Labor Red Banner Inst of Steel imeni I. V. Stalin, Min Higher Education USSR, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

SOV/137-58-8-17350

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 165 (USSR)

AUTHOR: Sokolova, N.K.

TITLE: Organization of the Work of High-frequency Hardening Installations (Organizatsiya raboty vysokochastotnykh zakalochnykh ustyanovok)

PERIODICAL: Sb. nauchn. tr. Zhdanovsk. metallurg. in-t, 1957, Nr 4,  
pp 195-204

ABSTRACT. The output of the single-position hardening machine (HM) depends on the absolute values of the machine and auxiliary time and can be expressed by the formula  
 $P = 3600 / (T_c + T_h + T_a)$  (items/hour), where  $T_h$  is the heating time,  $T_c$  is the cooling time,  $T_a$  is the time of the auxiliary operations. In case the HM has several heating positions, the output depends also on the extent of overlapping of the machine time in one position by the auxiliary time in the other, the extent of overlapping in turn depends on the selection of the articles for simultaneous hardening in adjacent positions as well as on the organization of the work of the latter. The extent of overlapping is established by means of graphs. The graphs of

Card 1/2

SOV/137-58-8 17350

Organization of the Work of High-frequency Hardening Installations

the sequence of heating, cooling, and auxiliary operations are adduced. A semianalytical estimation of the timing of the cycle (that is, the frequency rate of the discharge of each article after the heat treatment operation) in two versions in relation to the organization of the work is proposed for the estimation of the output of a (multiposition) HM. The incorporation of HM with time interlocks into a "waiting circuit" is economically expedient whenever it is impossible to organize simultaneous servicing of several machines during programmed pauses in operation. Interlocking two adjacent positions of an HM into the "waiting circuit" is expedient in all cases.

A.B.

1. Metals--Hardening    2. High frequency currents --  
Applications    3. Machines--Design    4. Machines--  
Performance

Card 2/2

SOKOLOVA, N.K., kand.tekhn.nauk

Technical and economic efficiency of various methods of built-up  
welding of iron mill rolls. Svar. proizv. no.5:19-21 My '61.  
(MIRA 14:4)

1. Zhdanovskiy metallurgicheskiy institut.  
(Rolls (Iron mills)--Maintenance and repair) (Hard facing)

SOKOLOVA, N.K.

Economic effect of various methods of hard facing of iron-mill  
rolls at the Yenakiyev Metallurgical Plant. Izv. vys. ucheb. zav.;  
chern. met. 6 no.6:219-226 '63. (MIRA 16:8)

1. Zhdanovskiy metallurgicheskiy institut.  
(Yenakiyev--Hard facing--Costs) (Rolls (Iron mills))

BARAMBOYM, N.K., doktor khim. nauk, prof.; SOKOLOVA, N.K., inzh.

Investigating the mechanochemical derivatives of polyamides.  
Nauch. trudy MTILP 25:146-149 '62. (MIRA 16: 8)

1. Kafedra fizicheskoy i kolloidnoy khimii Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

## PHASE I BOOK EXPLOITATION

SOV/5053

*SOKOLOVA, N. M.*

Vsesoyuznaya konferentsiya po treniiu i iznosu v mashinakh. 3d, 1958.

Izdat. i Izdatostroyost' Antifrictionnye Materialy (Wear and Wear Resistance, Antifriction Materials) Moscow, Izd-vo AN SSSR, 1960, 273 p. Errata slip inserted. 3,500 copies printed. (Series: Its: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Rep. Ed.: N. M. Khrushchov, Professor; Eds. of Publishing House: M. Yu. Klebanov, and S. L. Orpik; Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya Konferentsiya po treniiu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas:

- 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairman: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. E. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: O. V. Tsvetkov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairman: B. V. Derzhin, Corresponding Member of the Academy of Sciences USSR, and I. V. Krashelskiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Krushchov, Doctor of Technical Sciences); and 5) Friction and Antifriction Materials (Chairman: I. V. Krusel'skiy, Doctor of Technical Sciences), and M. M. Krushchov, Doctor of Technical Sciences). Chairman of the General assembly (on the first and last day of the conference) was Academician A. B. Savchenko. L. Yu. Puzankov, Candidate of Technical Sciences, was scientific secretary. The transactions of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are: modern developments in the theory and experimental science of wear resistance of materials, specific data on the wear resistance of various combinations of materials, methods for increasing the wear resistance of certain materials, the effects of friction and wear on the structure of materials, the mechanism of the seizing of metals, the effect of various types of lubricating materials on seizing, abrasive wear of a wide variety of materials and components under many different conditions, modern developments in antifriction material, and the effects of finish machining on wear resistance. Many personalities are mentioned in the text. References accompany most of the articles.

Doncharenko, V. D. Some Results of an Investigation of the Quality of Piston Rings of Diesel Motors Used in Automotive Tractors	208
Kurin, M. P., and N. M. Sokolova. Isothermal Wear of Metals as a Result of Their Interaction With a Polishing Abrasive	216
Martikash, I. I., and A. I. Volodin. Analysis of the Wear of the Flanges of the Crankshaft of a D-50 Diesel Locomotive, and Systematic Methods for Measuring the Wear	221
Puzankov, V. V. Surface Finish of the Flanges of the GAZ-51 Crankshaft and Bearing Bushings of the GAZ-51.	225
Savitskiy, E. V. On the Problem of the Relationship Between the Abrasive Wear of Metals and the Strength Properties of the Lattice	230

Card 9/13

7

SOKOLOVA, N.M.; MALYUTIN, K.G.

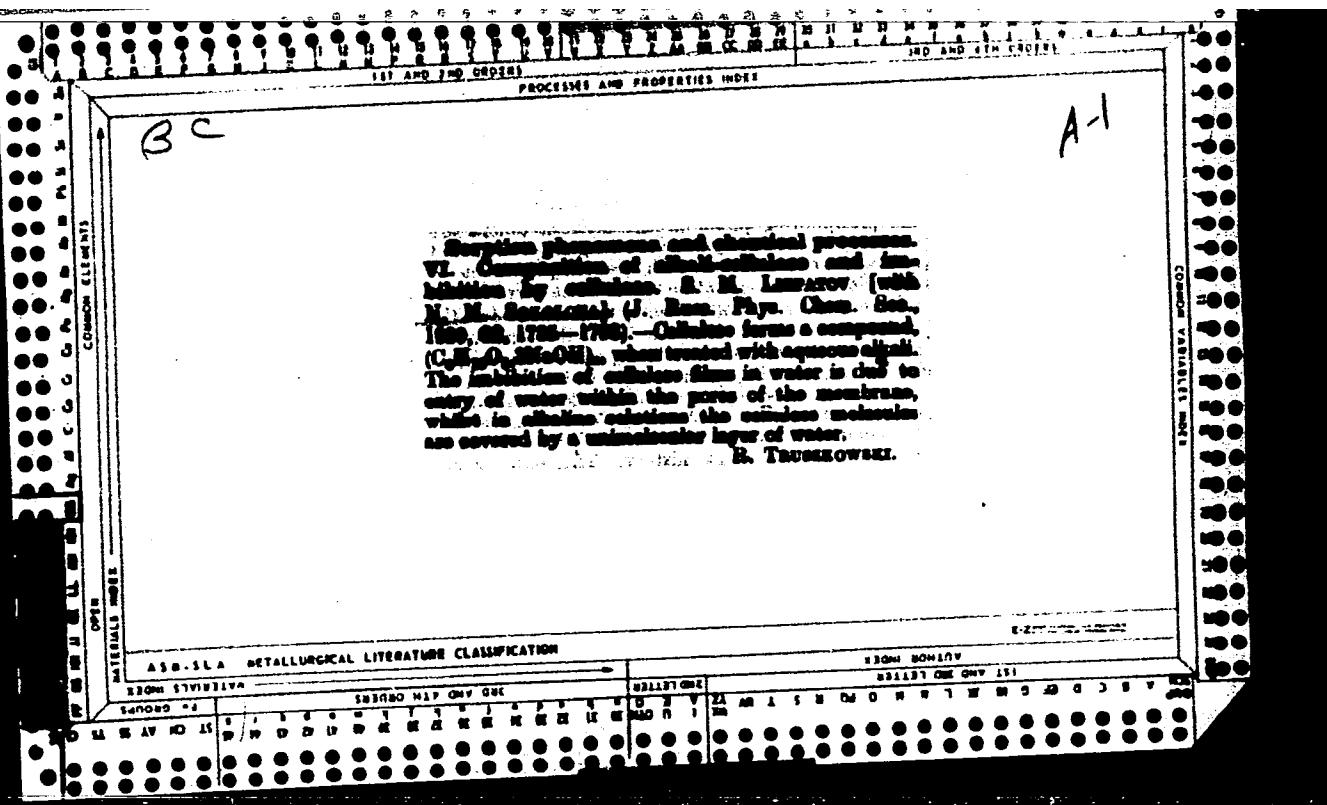
"Vegetation of Sverdlovsk Province; geobotanical regions, map,  
and description of vegetation" by K.K.Poluiakhtov. Pt.1: Description  
of plant formations of forests, meadows, and bogs of the province.  
Reviewed by N.M.Sokolova, K.G.Maliutin. Bot. zhur. 46 no.4:594-595  
Ap '61. (MIRA 14:3)

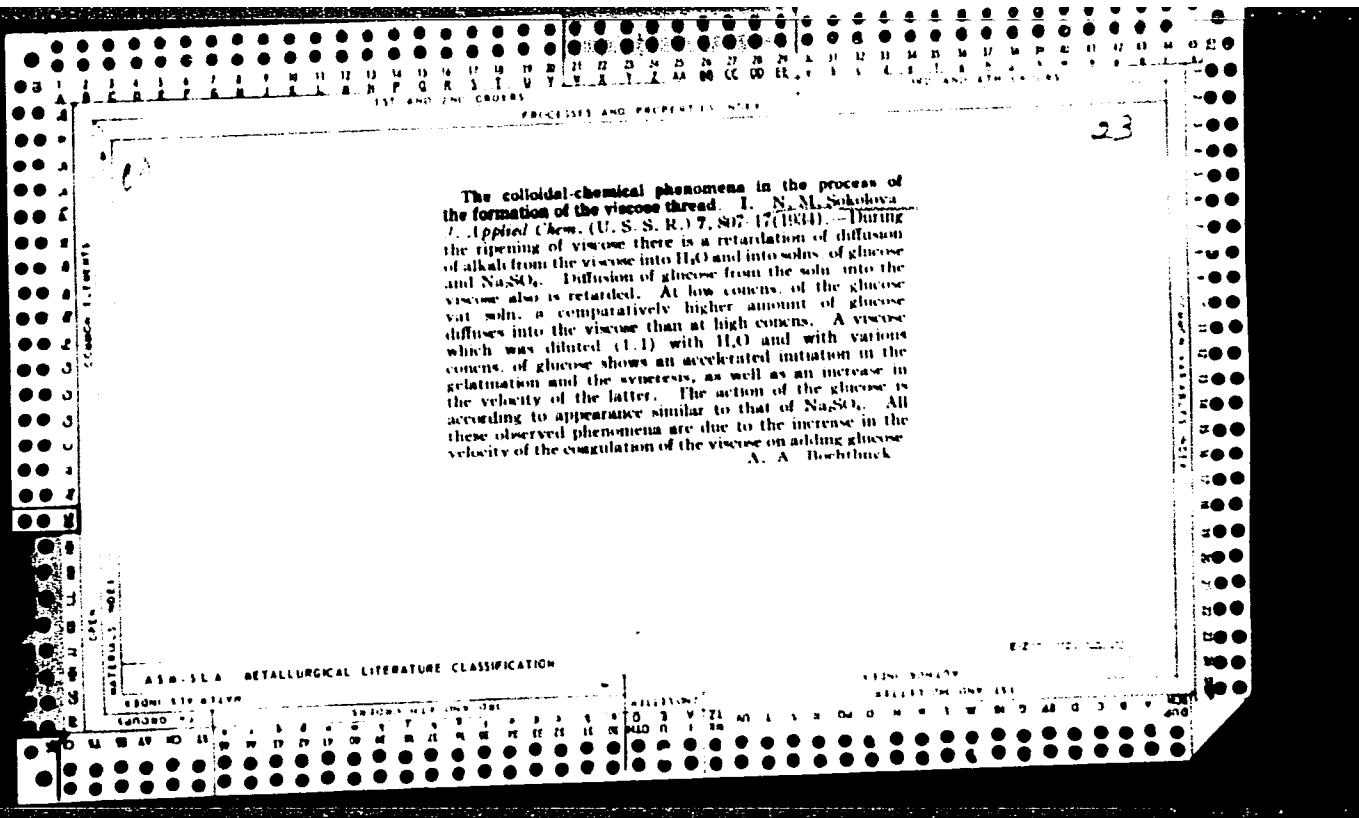
(Sverdlovsk Province—Phytogeography)  
(Poluiakhtov, K.K.)

VASIL'TSOV, V.D.; VOLODARSKIY, L.M.; VOLCHENKO, M.Ya.; GALETSKAYA, R.A.; IROV, N.I.; KARINYA, L.F.; KONOVALOV, Ye.A.; MATVIYEVSKAYA, E.D.; PETRESKU, M.I.; RUDAKOV, Ye.V.; SAYFULINA, L.M.; SKVORTSOVA, A.M.; SOKOLOVA, N.M.; SOTNIKOVA, I.A.; STOLPOV, N.D.; SURKO, Yu.V.; TEI, V.A.; TRIGULENKO, M.Ye.; FIRSOVA, Yu.V.; SHABUNINA, V.I.; YUNIN, M.N.; RYABUSHKIN, T.V., doktor okon. nauk, otv. red.; ALANPIYEV, P.M., red.; PAK, G.V., red.; GERASIMOVA, D., tekhn.red.

[Economy of socialist countries, 1960-1962] Ekonomika stran sotsializma, 1960-1962gg. Moskva, Izd-vo "Ekonomika," 1964.  
(MIRA 16:12)  
261 p.

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisticheskoy sistemy.  
(Communist countries--Economic conditions)





SOKOLOVA, N. M.

Dissertation: "Factors Affecting the Wettability of Cotton Fibers." Cand Tech Sci,  
Moscow Textile Inst, Moscow 1953.

W-30928

SO: Referativnyy Zhurnal, No. 5, Dec 1953, Moscow, AN USSR (X-10055)

Sokolova, N.M.

✓ Factors affecting the wettability of cotton fibers. N. M. Sokolova, P. P. Viktorov, and F. I. Sadov. *Nauk.-Tehnich.-Tekstilnoe. Trudy Moskov. Tekstil. Inst.* 13, 40-60(1954); *Referat. Zhur., Khim.* 1955, No. 2809.—The removal of wax-like and pectinous substances from the fibers and crushing the primary wall of the fiber did not materially affect the thermal stability of wetting the fiber. This primarily depended on increasing on the accessible surfaces of the fibers the no. of free OH groups in which the strength of the H bond in subsequent drying is low. Another influential factor was making denser the structure of the fiber, which led to reducing the mobility of macromols. This last resulted in a great increase of the stability of the system and particularly in a great thermal stability of the wetting. This was confirmed by infrared absorption spectra for cellulose before and after alkali treatment of cotton fibers.

M. Hoseh

*Mathes* 3

SADOV, Fedor Ivanovich; SOKOLOVA, Nadezhda Mikhaylovna; SHIKANOVA,  
Iraida Aleksandrovna; KORCHAGIN, Mikhail Vladimirovich;  
KALININA, Kapitolina Georgiyevich; MOYGANOV, P.V., retsenzent;  
GUSEVA, Ye.M., redaktor; MEDVEDYEV, L.Ya., tekhnicheskiy  
redaktor.

[Laboratory manual for the course "Industrial chemistry of  
fibrous materials." Laboratornyi praktikum po kursu "Khimi-  
cheskaia tekhnologija voloknistykh materialov." Moskva, Gos.  
nauchno-tekhn.izd-vo Ministerstva promyshl.tovarov shirokogo  
potrebleniia SSSR, 1955. 426 p. (MLRA 8:12)  
(Textile chemistry)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652110018-6

Sokolova, N.M.

*Makar* Cyanoethylation of cotton and flax. F. I. Sadov and  
N. M. Sokolova. *Tekstil. Prom.* 16, No. 5, 33-6 (1956).—  
A review of foreign publications (cf. Grant, et al., *C.A.*  
50, 3540b, 7252c). *Elisabeth Barabash* *R*

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652110018-6"

SHIKANOVA, I.A.; SOKOLOVA,N.M.

Qualitative analysis of synthetic fibres. Tekst.prom. 18 no.5:57-59  
My '58. (MIRA 11:5)

1. Kafedra khimicheskoy tekhnologii voloknistykh materialov  
Moskovskogo tekstil'nogo instituta.  
(Textile fibres, Synthetic--Analysis)

Geological Institute, Moscow, Russia.

Geological Institute of the Khibiny Mountains. Report No. 193  
no. 65641-654 194. (NICA 12:4)

1. Institut geologii rudykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii (IGEM) AN SSSR, Moscow.

L 25425-66 EPF(n)-2/EWT(m)/T

ACC NR: AP6010492

SOURCE CODE: UR/0201/65/000/003/0021/0028

AUTHOR: Sokolova, N. M.

42  
B

ORG: none

TITLE: Solution of the problem of analytically constructing an optimal regulator for a nuclear power installation

19

SOURCE: AN BSSR. Vestsi. Seryya fizika-tehnichnykh navuk, no. 3, 1965, 21-28

TOPIC TAGS: nuclear reactor control, automatic control theory, optimal control, heat equation, partial differential equation, dynamic programming

ABSTRACT: The author develops an optimal-control system for a nuclear installation consisting of a reactor, regenerator, cooler, and turbine compressor. The partial differential equations of the system are reduced to ordinary differential equations by averaging the parameters of the length of the heat exchangers with subsequent establishment of a connection between the average gas temperature and

Card 1/2

L 25425-66

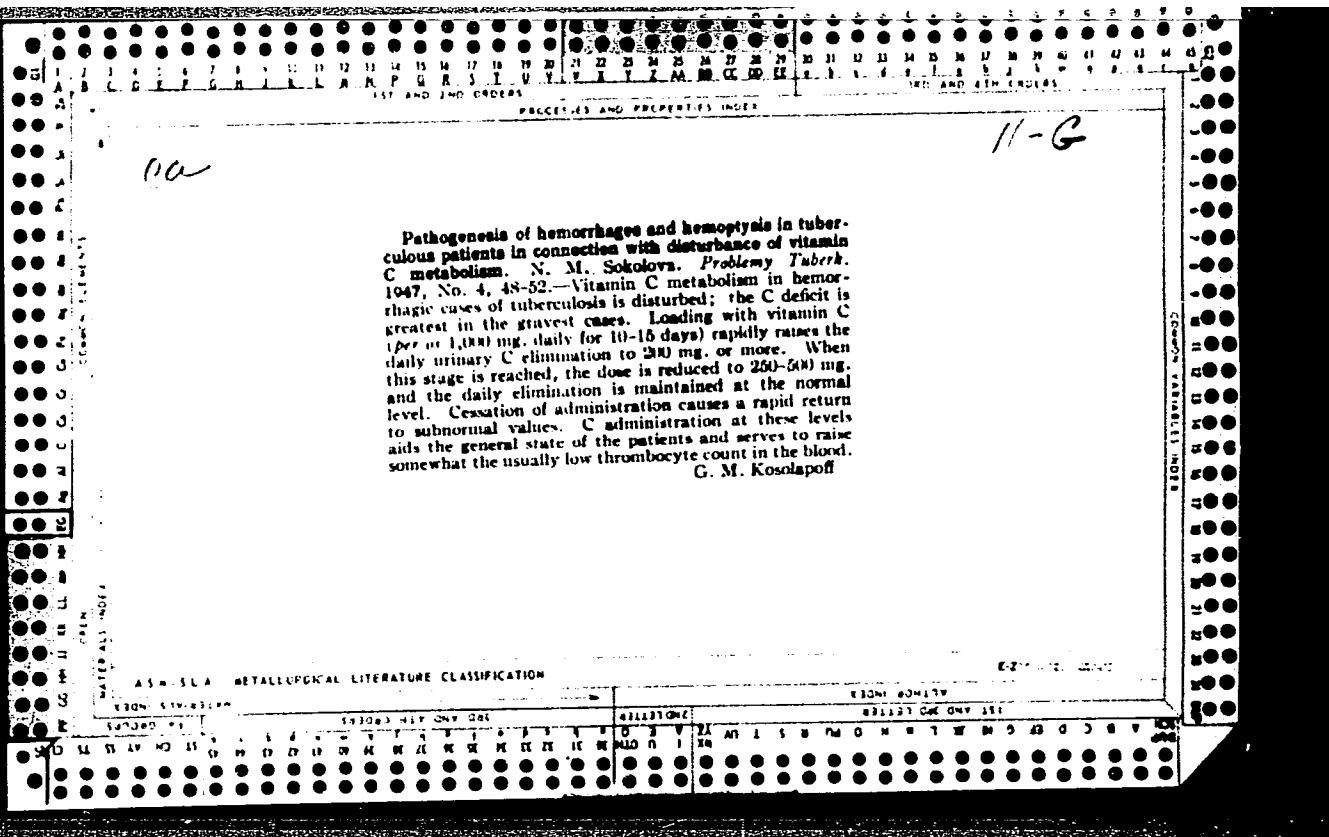
ACC NR: AP6010492

the inlet and outlet temperatures, in the form of a uniformly converging series. Means of designing a programming element that develops the optimal program for the system, and an optimal regulator capable of following the specified program and correcting the operation of the system are discussed. By way of an example, a simple program aimed at maintaining a system in the stationary condition is analyzed mathematically. A similar method can be used to control a specified change in output power, to ensure cooling of the reactor within a minimum time, and other control operations. The connection between the dynamic programming as described in the paper and Lyapunov functions is briefly indicated. Orig. art. has: 2 figures and 7 formulas.

SUB CODE: 18, 14/ ORIG REF: 006 / SUBM DATE: none

Card

2/2 CC



Ascorbic acid and growth of tuberculous cultures in liquid medium. N. M. Sokolova and M. A. Linnikova. *Zhurn. Mikrobiol., Epidemiol. i Immunobiof.* 1947, No. 9, 76-80.—Vitamin C 10-25 mg. % retarded the growth of cultures of human tuberculosis bacteria but not bovine type. Ascorbic acid and insulin and camphor shock in tuberculous animals. *Ibid.* 81-3.—The administration of 100 mg. ascorbic acid to tuberculous guinea pigs increased the resistance to insulin and camphor shock and reduced the mortality. H. L. Williams

11 E

A.S.M.-SEA METALLURGICAL LITERATURE CLASSIFICATION

**APPROVED FOR RELEASE: 08/25/2000**

CIA-RDP86-00513R001652110018-6"

SOKCLOVA, N. M.

25905 Sokolova, N. M. Krovotacheniya I Krovokharkaniya U Tuberkuleznykh  
Bol'nykh V Svyazi S Narusheniyem Askorbinovogo Otmena. Vracheb.  
Delo, 1948, No. 6, STB. 491-96

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

CA

HE

Action of vitamin C on adrenal function in tuberculosis.  
N. M. Sokolova (All Union Exptl. Med. Inst., Leningrad); *Problemy Tuber.* 1950, No. 1, 77-8.—Heavy dosage of vitamin C (up to 1000 mg.) in patients with advanced tuberculosis, with continuation daily for 2 months, leads to normalization of Na/K ratio, raises the general body tone, lowers pulse rate and raises blood pressure to near normal levels.  
G. M. Kosolapoff

KASHKIN, P.N.; DOLINSKAYA, A.T.; SOKOLOVA, N.M.; KORNEV, P.G., professor, direktor;  
KUPALOV, P.S., professor, zavednyushchii.

Bactericidal properties of the natural gastric juice. Zhur.mikrobiol.epid.i  
immun. no.8:59-64 Ag '53. (MIRA 6:11)

1. Institut kostnokhirurgicheskogo tuberkuleza (for Kornev). 2. Fisiologicheskiy otdel im. O.P.Pavlova (for Kupalov). (Gastric juice)

PAVLOVSKIY, G.T.; SOKOLOVA, N.M..

Studying the morphological characteristics of tuberculosis bacteria  
with an electron microscope. Probl.tub. no.3:61-65 My-Jy '55  
(MLRA 8:8)

1. Iz otdela virusologii (zav.-chlen-korrespondent AMN SSSR A.A.  
Smorodintsev) Instituta eksperimental'noy meditsiny AMN SSSR i Go-  
sudarstvennogo nauchno-issledovatel'skogo instituta khirurgicheskogo  
tuberkuleza (dir.-deystvitel'nyy chlen AMN SSSR prof.P.G.Kornev).

(Mycobacterium TUBERCULOSIS,  
morphol., lectron microscopy exam.)  
(MICROSCOPE, ELECTRON,  
of M. tuberc. morphol.)

YURGINA, Z.A.; SOKOLOVA, N.M.; NIKITINA, G.P.

Possibility of the prolonged preservation of the plague microbe in  
media from the fermentative hydrolysate of casein. Sbor. nauch.  
rab. Elist. protivochum. sta. no. 1:187-191 '59. (MIRA 13:10)  
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA) (PLAQUE) (CASEIN)

SOKOLOVA, N. M. Cand Med Sci -- "For the problem of the diagnosis of plague under natural conditions." Saratov, 1960 (Min of Health USSR. All-Union Sci Res Inst "Mikrob"). (KL, 1-61, 211)

-436-

POKOTINSKIY, I.S.; SOKOLOVA, N.M.; STREMILOVA, A.Ye.

Electron microscopic studies on the morphological structure of  
Mycobacterium tuberculosis. Probl.tub. 38 no.4:94-99 '60.  
(MIRA 14:5)

(MYCOBACTERIUM TUBERCULOSIS)

BAKIRAKH, Ye.E.; DAVANKOV, A.B.; MARTENS, L.A.; LAUFER, V.M.; SOKOLOVA, N.M.;  
OBUKHNOVA, Z.A.; FILIPPOVA, N.Ye.

Cultivation of the plague microbe on media of acid casein hydrolysate  
demineralized using an ion-exchange resin. Zhur.mikrobiol., epid. i  
immun. 33 no.3:51-55 Mr '62.  
(MIRA 15:2)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta  
mikrobiologii i epidemiologii Yugo-Vostoka SSSR "Mikrob".  
(PASTEURELLA PESTIS) (CASEIN) (ION EXCHANGE RESINS)

MINEYEV, P.P., kand.med.nauk; SOKOLOVA, N.M., doktor med.nauk

Angiographic changes in experimental osteoarticular tuberculosis.  
Report No.1. Probl.tub. no.1:93-98 '62. (MIFI A 15:8)

1. Iz Leningradskogo gosudarstvennogo nauchno-issledovatel'skogo  
instituta (direktor i nauchnyy rukovoditel' - laureat Gosudarst-  
vennoy premii deystvitel'nyy chlen AMN SSSR prof. P.G. Kornev)  
khirurgicheskogo tuberkuleza.

(BONES—TUBERCULOSIS) (ANGIOGRAPHY)

SOKOLOVA, N.M.; KASATKINA, N.M.; SHCHUKAREVA, N.K.; LEVKOVICH, Yu.I.

Laboratory diagnosis of candidiasis in patients with malignant tumors. Vop. onk. 9 no.8:49-54 '63 (MIRA 17:4)

1. Iz kliniki-diagnosticheskoy laboratorii (zav. - dotsent I.F. Grekh) Instituta onkologii AMN SSSR (direktor - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov. Adres avtorov: Leningrad, P-129, 2-ya Berezovaya alleya, 3, Institut onkologii AMN SSSR.

SOKOLOVA, N.M.

Microflora of the bronchial secretions in pulmonary cancer.  
Vop. onk. 8 no.11;69-77 '62. (MIRF 17:6)

I. Iz II khirurgicheskogo otdeleniya (zav. chlen-korrespondent AMN SSSR prof. V.I. Rakov) i kliniko-diagnosticheskoy laboratorii (zav. dozent I.V. Grekh) Instituta onkologii AMN SSSR (dir.-deystvitel'nyy chlen AMN SSSR prof. V.I. Berezhov). Adres avtora: Leningrad, P-129, 2-ya Berezovaya ulitsa, 3, Institut onkologii AMN SSSR.

SOKOLOVA, N.M.

Characteristics of the microflora in gastric cancer. Vop. onk. 10  
no.4:19-25 '64. (MIRA 17:11)

I. Iz kliniko-diagnosticheskoy laboratorii (zav. - kand. med. nauk  
datsent I.F. Grekh) Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov). Adres avtora: Leningrad, P-129,  
2-ya Berezovaya alleya, 3, Institut onkologii SSSR.

SOKOLOVA, N.N.; SHCHUKAEVA, N.K.; KARASIK, B.N.

Yeastlike fungi of the genus *Candida* in patients with malignant tumors. Vop. onk. 11 no.4:22-25 '65. (MFA 16:8)

1. Iz kliniko-diagnosticheskoy laboratorii (zav. - doktoren I.P. Gorskikh) Instituta onkologii AMN SSSR (direktor - deystvivayushchii chlen AMN SSSR prof. A.I.Serebrov).

SOKOLOVA, N.M.; SHCHUKARSKA, N.K.; LEVITSKAYA, N.A.; KARASIK, B.N.

Serological diagnosis of candidiasis in patients with malignant neoplasms. Vop. onk., t. no. 8.52-54 'cja

(MIRA 18:11)

-1. Iz kliniko-diagnosticheskoy laboratorii (zav. - dotsent I.F.Grekh) Instituta onkologii AMN SSSR (direktor - deystvitel'nyy chlen AMN SSSR - prof. A.I.Sarsburov).

SOKOLOVA, N.M.; TURBINA, I.I.; SEL'DOVICH, D.R.

Content of vitamin B<sub>12</sub> in the blood of patients with malignant  
tumors. Vop. onk. 11 no.9:36-42 '65. (MIRA 12:9)

I. Iz III khirurgicheskogo otdeleniya (zav. - prof. V.P.Tobile-  
vich) i kliniko-diagnosticheskoy laboratorii (zav. - dotsent I.F.  
Grekh) Instituta onkologii AMN SSSR (dir.- deystvitel'nyy chlen  
AMN SSSR prof. A.I.Serebrov).

L 21123-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)  
ACC NR: AP6011957

SOURCE CODE: UR/0201/65/000/002/0098/0105

AUTHOR: Sokolova, N.M.

ORG: none

TITLE: Some theoretical questions about the solution to problems in the analytic construction of optimal control systems 14

SOURCE: AN BSSR. Vestsii. Seryya fizika-tehnichnykh navuk, no.2, 1965, 98-105

TOPIC TAGS: optimal control, electronic computer, differential equation

ABSTRACT: The concept of "analytic optimal control construction" (AORC) was introduced by A. M. LETOV to denote the use of mathematics, both classical and modern, to find the analytic expression for a control meeting a certain criterion of optimality. The present article systematizes the theoretical premises for the solution to problems in the analytic construction of optimal control systems which are subsequently used for the statement and practical solution of an AORC problem for an object described by a system of  $n = 29$  differential equations, whose right-hand side is the sum of linear phase coordinates, control parameters, and their paired products with constant coefficients. The use of electronic computers made it possible to carry this problem through to complete solution and to construct the block diagram for a control consisting of an adder, product blocks, and amplifiers with defined amplification factors. The article also considers the problem of finding the optimal program for the operation of a reactor described by a system of four equations (two kinetics equations)

Card 1/2

41  
40  
B

2

L 21123-66

ACC NR: AP6011957

and two heat equations), provided that the quadratic functional of the phase coordinates and control parameter is minimized and the time in which the optimal process must be effected is given. The author divides the theory of optimal systems into two classes of problems: 1) problems related to finding a system which is optimal with respect to the control regime (finding the programming element); and 2) problems related to finding a system which is optimal with respect to the transient process (finding the optimal control). The first class of problems is solved by means of L. S. PONTRYAGIN's principle of the maximum, with the use of computers. The solution is obtained in the form of a function of time and initial and final conditions; and the programming element is constructed according to this solution. The second class of problems is solved by the method of dynamic programming, underlying which is the "principle of optimality," first formulated by RICHARD BELLMAN. Following from this principle is a method of solution which makes it possible to obtain the analytic expression of a control performing an optimal transient process. Orig. art. has: 11 formulas. [JPRS]

SUB CODE: 12, 09 / SUBM DATE: none / ORIG REF: 010

Card 2/2 ddu

SOKOLOVA, N.N., inzh.

The BMT-2 remote control and telemetering device for bilateral signal rebroadcasting in power system administrations with joint dispatcher control. Trudy VNIE no.17:46-57 '63.

Contactless BTS-2 signaling and remote control device for power plants and substations. Trudy VNIE no.17:93-99 '63.  
(MIRA 17:9)

1.2310

1575

29054  
S/125/61/000/010/014/014  
D040/D112

AUTHOR: Sokolova, N.N.

TITLE: A scientific and technical conference on vacuum diffusion welding of metals, alloys and nonmetallic materials

PERIODICAL: Avtomaticheskaya svarka, no. 10, 1961, 93-94

TEXT: In May 1961, nauchno-tehnicheskoye soveshchaniye po diffuzionnoy svarke v vakumme metallov, splavov i nemetallicheskikh materialov (Scientific and Technical Conference on Vacuum Diffusion Welding of Metals, Alloys and Nonmetallic Materials) was convened in Moscow by the Nauchno-issledovatel'skaya laboratoriya diffuzionnoy svarki v vakumme (Scientific Research Laboratory of Vacuum Diffusion Welding) jointly with the Moskovskoye oblastnoye pravleniye NTO Mashinostroyeniya (Moscow Oblast Board of the NTO of Machine-Building). Three hundred delegates from 117 Soviet enterprises, sovnarkhozes, scientific-research institutes and OKBs attended the conference. Professor Kazakov, Head of the Scientific Research Laboratory of Vacuum Diffusion Welding and author of the method, reported on "The present state and future prospects of development in vacuum diffusion welding".

Card 1/3

29054  
S/125/61/000/010/014/014  
D040/D112

A scientific and technical...

The method is coming into use for scarce and difficult-to-weld metals (titanium, tantalum, tungsten, molybdenum, zirconium, beryllium, niobium, germanium, etc.), and for joining metals of a different nature, cermets and ceramic alloys. Together with industrial plants, the laboratory used the method in the production of molybdenum disilicide heaters, parts for electronic and mercury devices, brake sectors, shank-tool parts, etc. A.P. Shishkova, Candidate of Technical Sciences, and B.A. Meyler, Engineer, reported on "Welding tool-parts made of P18 (R18) high-speed steel to 45 machinery steel. The method raised the quality of the tools, improved the work conditions, and resulted in the saving of 120,000 rubles worth of metal annually, at the zavod "Frezer" ("Frezer" Plant) alone. Production of an СДВУ-7 (SDVU-7) unit at the "Frezer" Plant was mentioned. P.I. Shestkov, I.S. Zolotarev and A.S. Novgorodov, Engineers, gave a joint report on the application of vacuum diffusion welding for the production of molybdenum disilicide heaters, which had to be imported up to 1960. V.N. Moiseyev and B.T. Krysin, Engineers, reported on "Vacuum welding of bimetal parts (cast iron + steel + cast iron) for brake shoes and friction discs of high-speed machines" and stated that the method will make it possible to mechanize and automate the production of bimetal sectors, improve the

Card 2/3

134000

80443  
SOV/112-60-2-4.1030

Translation from: Referativnyy zhurnal Elektrotehnika, 1960, Nr 2, p 216  
(USSR)

AUTHOR: Sokolova, N.N.

TITLE: A Distributive Time Code <sup>q</sup> Telecontrol-Telesignalling <sup>b</sup> Device of  
a Short Operating Time

PERIODICAL: Tr. Vses. n.-i. in-ta elektroenerg., 1958, Nr 7, pp 115 - 130

ABSTRACT: A distributive telecontrol-telesignalling device ~~VRT-53/rx~~ is  
described, in which the time selection method is used, that is  
commands or signals are transmitted by prolongation of a pulse  
or an interval in a series. To increase the capacity of the  
device an one-step group selection combined with the selection  
of the character of an operation is applied. The capacity of  
the device consists of 64 telesignalling objects, 16 control  
objects and 15 telemetering calls. The full transmission time  
of a command or signal does not exceed 1.3 - 1.4 sec. In a  
command transmission the object selection is realized by pro-  
longing the interval and the group selection by prolonging the

Card 1/2

4

80443

SOV/112-60-2-4.1030

A Distributive Time Code Telecontrol-Telesignalling Device of a Short  
Operating Time

pulse. In an information transmission the group is selected by prolonging the interval and the objects by prolonging the pulse. In the device, when commands are transmitted, quantitative checking the cophasality of distributors and a numerical method of protection are applied. The protection of telesignals is realized by checking the number of group pulses and by measuring the duration of an interval. An analysis of possibility of raising the operation speed of distributive time selection devices is made. The block diagram and the principal assemblies of the device are described. Since 1955 there are 5 sets of VRT-53/r in use. Eight illustrations.

V.Ye.Kh.

✓

Card 2/2

KANEVSKAYA, S.M.; RADZYUKEVICH, T.M.; KITAYEVA, L.N.; SOKOLOVA, N.N.

Introduction of a rapid drying SM-1 binder. Lit. proizv. no.10:  
5-6 0 '63. (MIRA 16:12)

SOKOLOVA, N.N.

Feeding habits of the common cormorant in the Volga Delta. Vop.  
ikht. no.5:170-185 '55. (MIRA 9:5)

1. Astrakhanskiy gosudarstvennyy zapovednik.  
(Volga Delta--Cormorants)

SOKOLOVA, N. N.

N. N. Sokolova, L. P. Gmid "Comparative Petrography and Mineralogical Analysis of Uev-onian Deposits in the Krasonkamsk and Kizel-Kosva Regions and in the Region of the Basin of the Chussovaya River," Dok. AN, 54, Nos. 4-5, 1946. Mbr., Inst. Mineral Fuels, Dept. Tech. Sci., Acad. Sci., -1946-.

CA

8

Petrographic-mineralogical investigation of Devonian  
deposits in the Molotov, Kirovsk-Kos'vinak, and Chusovsk  
regions. N. N. Sokolova and L. P. Gmid. *Trudy Inst.*  
*Nefti Akad. Nauk S.S.R.* I, No. 1, 23-33(1949).

M. Hesch

1952

SOKOLOVA, N. N.

37057

Petrografo-minerologicheskie issledovaniya devonskikh otlozhenii Yugo-vostochnoy teterif i prilegayushchikh v nej s yugoi rayonov chkalovskoy i kuybyshevskoy oblastey. Trudy inst. nefti (akad. Nauk SSSR), T. I. vyp. I, 1949, c. 34-53.  
Bibliogr: 8 Nazv

JO: Letopis' Zhurnal'nykh Statey, Vol. 45, Moscow, 1949

SOKOLOVA, N. N.

Petrography of the Devonian deposits of the Molotov Ural region and the paleogeography of the time of their formation. Moskva, Izd-vo Akademii nauk SSSR, 1952. 177 p. maps.  
(54-18449)

QE451.R856

SARKISYAN,S.G.; SOKOLOVA,N.N.; KLIMOVA,L.T.; TUMAREV,K.K.

Tertiary deposits of the Lake Baikal region and their formations.  
Trudy Inst.nefti no.5:22-48 '55. (MIRA 8:12)  
(Baikal region--Geology, Stratigraphic)

Город на Ангаре.

KUNGUROV, Gavriil Filippovich; SOKOLOVA, N.N., red.; SOROKINA, T.I., tekhn.red.

[City on the Angara] Gorod na Angare; ocherk. [Irkutsk] Irkutskoe  
knizhnoe izd-vo, 1956. 58 p. (MIRA 11:1)  
(Irkutsk--Description)

15-1957-10-13967

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
pp 89-90 (USSR)

AUTHOR: Sokolova, N. N.

TITLE: The Petrographic Nature and the Conditions of Formation  
of the Jurassic and Lower Cretaceous Rocks of the Zeysko-  
Bureinskaya Lowland and the Bureinskaya Basin (Petrogra-  
ficheskaya kharakteristika i usloviya obrazovaniya jur-  
skikh i nizhnemelovykh otlozheniy Zeysko-Bureinskoy niz-  
mennosti i Bureinskoy vpadiny)

PERIODICAL: Tr. In-ta nefti. AN SSSR, 1956, vol 7, pp 147-171

ABSTRACT: The Bureinskaya basin was studied in the region of Ust'-  
Umal'ta. It contains marine sediments, the Bureinskaya group, in which the following series are distinguished:  
1) the Umal'tinskaya, Liassic, 1,000 m thick; 2) the Epikanskaya, Dogger, 1,000 to 1,100 m thick; 3) the El'-  
ginskaya, Malm, 1,800 m thick; and 4) the Chaganyyskaya transitional to continental Cretaceous, 600 to 700 m  
thick. The total thickness of the Jurassic rocks is

Card 1/4

15-1957-10-13967

The Petrographic Nature and the Conditions of Formation of the Jurassic and Lower Cretaceous Rocks of the Zeysko-Bureinskaya Lowland and the Bureinskaya Basin

of a variety of rocks. The transported material came from the Bereinskiye (metamorphic) and the Turanskiye (granitoidal) Mountains. Unsorted siltstone and fine-grained sandstone particles are distinctly dominant in the Jurassic rocks. Continental beds began to accumulate in the area of the Bureinskaya basin toward the end of the Jurassic. The source of the detritus in the Lower Cretaceous appears to have been, as it was earlier, the Pureinskiye and Turanskiye Mountains. The presence of fluviatile, lacustrine, and lacustrine-paludal sediments with layers of autochthonous coals is noted. The author suggests that marine Jurassic rocks, similar to those in the Bureinskaya region, occur beneath the continental Lower Cretaceous rocks of the Zeysko-Bureinskaya lowland, inasmuch as the Zeyskiye depression apparently formed earlier than the Bureinskaya. The Zeyskiye, Novoyampol'skiye, and Depskiye series were formed in a continental environment. Apparently the fluviatile and lacustrine environment changed to lacustrine-paludal toward the end of the Lower Cre-

Card 3/4

15-1957-10-13967

The Petrographic Nature and the Conditions of Formation of the Jurassic and Lower Cretaceous Rocks of the Zeysko-Bureinskaya Lowland and the Bureinskaya Basin

taceous. Spurs of the Tukuringra-Dzhagdy Mountains were the source areas for the detritus making up these series. The conditions of accumulation, especially in the Zeyskaya series, were similar to those in the Lower Cretaceous in the Bureinskiy basin. Apparently a large part of this group may be correlated with the Nikanskiy group of Bureya. This relationship is indicated by the unique plant group and by the common climatic environment, which promoted the formation of coal. In conclusion, the author indicates that the El'ginskaya and Chaganyyskaya series may possibly contain oil. They formed in a shallow marine basin and contain units of sandstone, which are possible collectors.

Card 4/4

V. M. Tseyuler

SOKOLOVA, N.N.

Metamorphic characteristics of Jurassic and Cretaceous sediments in the upper Amur region. Trudy Inst.nefti 9:133-135  
'58.  
(Amur Valley--Rocks, Crystalline and metamorphic)

SOKOLOVA, N.N.

Characteristics of the coal-bearing formation and patterned Cre-taceous sandstone formation in Voroshilov District. Trudy Inst. nefti 9:136-138 '58.  
(MIRA 12:4)  
(Slavyanskiy District--Rocks, Sedimentary)

3(0)

AUTHORS: Teodorovich, G. I., Khachatryan, R. O., Sokolova, N. N. SCV/2o-123-5-40/50

TITLE: Recent Data on the Stratigraphy and Lithology of the Terri-  
genous Lower Carboniferous Sediments of the Middle Povolzh'ye  
(Novyye dannyye po stratigrafii i litologii terrigenykh  
otlozheniy nizhnego karbona Srednego Povolzh'ya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 5,  
pp 914 - 916 (USSR)

ABSTRACT: The terrigenous, pre-Stalinogorsk- (dostalinogorskiye), Lower Carboniferous sediments in the Volga-Ural region are considered by one research group (Refs 1,3,4) as belonging to the Tour- naisian Stage, by another group as the lower part of the Visean Stage (Refs 6-8). However, most authors in these two groups agree that the pre- Stalinogorsk sediments form a unified mass. Thus, it would be appropriate to select an inde- pendent Substage of the Lower Carboniferous (Ref 5). The authors have studied the sections of the Kuybyshev region and of neighboring districts and have arrived at the conclusion that the Makinovskaya mass of V. M. Pozner (Ref 4) is not

Card 1/3

Recent Data on the Stratigraphy and Lithology of the SOV/2o-123-5-40/50  
Terrigenous Lower Carboniferous Sediments of the Middle Povolzh'ye

unified, and it's two parts have different ages: a) The lower part (Malinovskiye strata of the authors) belongs to the Upper Tournaisian Substage, and b) The upper part is Lower Visean in age (Radayevskiye strata of the authors). The Malinovskiye strata are closely related with the underlying Rakovskiye strata of the Kizelovskiy horizon, both lithologically and paleontologically, as well as by transition. The fauna occurring here indicates a Tournaisian age, especially the fish (identifications by D. V. Obruchev). In many districts, a noticeable regional interruption occurs between the Malinovskiye and Radayevskiye strata. This proves the correctness of the boundary between the Tournaisian and Visean Stages accepted by the authors. Spore-pollen assemblages have been recovered in both the Malinovskiye and Radayevskiye strata. The spores were studied by T. V. Byvshewa. The upper boundary of the Radayevskiye strata is drawn at the base of the mixed (Radayevskiy - Stalinogorskiy) assemblage. Faunal remains are rare in the Radayevskiye strata. A sudden replacement of Malinovskiye argillites by Radayevskiye aleuritic-sandy masses indicates uplift of the eroded

Card 2/3

Recent Data on the Stratigraphy and Lithology of the Sov/20-123-5-40/50  
Terrigenous Lower Carboniferous Sediments of the Middle Povolzh'ye

area as well as tectonic movements at the beginning of Radayevskiy time. The Radayevskiye strata, which are up to 150 m thick, can be clearly divided into 4 blocks. On the basis of the spore-pollen assemblage the Stalino-vorsk horizon is divided into 2 subhorizons. The terrigenous rocks in question forms a uniform, by and large regressive series of sediments. There are 8 Soviet references.

PRESENTED: July 28, 1958, by S. I. Mironov, Academician

SUBMITTED: July 24, 1958

Card 3/3

SOKOLOVA, N.N.; TEODOROVICH, G.I.; KHACHATRYAN, R.O.

Division of the Tournai-Vise terrigenous formation in the  
southern Kama-Kinel' Depression. Sov.geol. 2 no.10:20-32  
0 '59. (MIRA 13:4)

1. Institut nefti AN SSSR.  
(Kama Valley--Geology, Stratigraphic)  
(Kinel' Valley--Geology, Stratigraphic)

TEODOROVICH, Georgiy Ivanovich; SOKOLOVA, Natal'ya Nikolayevna;  
ROZONOVA, Yelena Dmitriyevna; BAGDASAROVA, Marina Vartanovna;  
AMMOSOV, I.I., doktor geologo-miner. nauk, otv. red.;  
NIKOLAYEVA, I.N., red. izd-va; SIMKINA, G.S., tekhn. red.

[Mineralogical and geochemical facies of the terrigene  
deposits of the lower Carboniferous in the greater part of the  
Ural-Volga region from the viewpoint of their oil and coal  
resources] Mineralogo-geokhimicheskie fatsii terrigennykh otlo-  
zhenii nizhnego karbona osnovnoi chasti Uralo-Volzhskoi ob-  
lasti v sviazi s ikh neftenosnost'iu i uglenosnost'iu. Moskva,  
Izd-vo Akad. nauk SSSR, 1962. 172 p. (MIRA 15:5)  
(Ural-Volga region--Geology, Stratigraphic)

BALIBALOV, I.A.; SOKOLOVA, N.N.; VARNAKOVA, N.L.; POFOV, P.D.;  
KHNOK, A., red.; RUDINA, G., tekhn. red.

[The strides of the seven-year plan; work results of Kuznetsk  
Basin workers during the first year of the seven-year plan  
and tasks for 1960] Shagi semiletki; itogi raboty truzhenikov  
Kuzbassa v pervom godu semiletki i zadachi na 1960 god. Keme-  
rovo, Kemerovskoe knizhnoe izd-vo, 1960. 150 p.

(MIRA 15:11)

(Kuznetsk Basin-Economic conditions)

DREYZIN, R.S.; SOKOLOVA, N.N.

Effect of myrtle and ericaceae extracts on experimental influenza.  
Zhur. mikrobiol. epid. i immun 28 no.2:128 F '57 (MLRA 10:4)

1. Iz Instituta virusologii AMN SSSR.  
(INFLUENZA) (BOTANY, MEDICAL)

ZHDANOV, V.M.; RITOVA, V.V.; ORLOVA, A.V.; SOKOLOVA, N.N.; GOLYGINA, L.A.

Characteristics of strains of influenza viruses isolated during 1957.  
Cop. virus 4 no.1:19-23 Ja-F '59. (MIRA 12:4)

1. Institut virusologii AMN SSSR, Moskva.  
(INFLUENZA VIRUSES.  
Russian strains isolated in 1957 (Rus))

SOKOLOVA, N.N.; APANASHCHENKO, N.I.; ZHDANOV, V.M.

Experimental study of influenza-diphtheria-whooping cough vaccine.  
Report No. 1: Immunological reaction to the influenza antigen.  
Vop. virus. 5 no. 1:33-37 Ja-F '60. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR i Institut epidemiologii i mikrobiologii imeni N.F. imeni N.F. Gamalei AMN SSSR, Moskva.

(INFLUENZA) (VACCINES)

APANASHCHENKO, N.I.; SOKOLOVA, N.N.; ZHDANOV, V.M.

Experimental study of influenza-diphtheria-whooping cough vaccine.  
Report No. 2: Immunological reaction to the diphtheria and whooping  
cough antigens. Vop. virus. 5 no. 1:57-61 Ja-F '60. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR i Institut  
epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR, Moskva.  
(DIPHTHERIA) (WHOOPING COUGH) (VACCINES)

SOKOLOVA, N.N., ABAKASHCHENKO, N.I., ZHDANOV, V.M.

"Experimental studies of combined influenza-diphtheria-pertussis vaccine."

Report submitted for the 1st Intl. Congress on Respiratory Diseases of Virus and Rickettsial Origin. Prague, Czech. 23-27 May 1961.

SOKOLOVA, N. N., Cand. Medic. Sci. (diss) "Grippe-diphtheria  
and Grippe-diphtheria-whooping cough Associated Vaccines,"  
Moscow, 1961, 9 pp. (Acad. Med. Sci. USSR) 250 copies (KL  
Supp 12-61, 289).

SOKOLOVA, N.N.; APANASHCHENKO, N.I.; NEFEDOVA, L.A.

Study of the reactogenicity and immunological effectiveness of influenza-diphtherial and influenza-diphtherial-whooping cough vaccines. Vop.virus. 7 no.6:688-693 N-D '62. (MIRA 16:4)

1. Institut virusologii imeni D.I.Ivanoskogo AMN SSSR i Institut epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR, Moskva.  
(INFLUENZA--PREVENTIVE INOCULATION)  
(DIPHTHERIA--PREVENTIVE INOCULATION)  
(WHOOPING COUGH--PREVENTIVE INOCULATION)

ACC NR: AP6021584

(W)

SOURCE CODE: UR/0402/66/000/003/0371/0372

AUTHOR: Orlova, N. N.; Sokolova, N. N.; Orlova, A. V.; Berlyant, M. L.;  
Tesminitskiy, G. L.; Jen, Kuei-fang

ORG: none

TITLE: Characteristics of influenza virus strains isolated at epidemiological  
Foci in 1965

SOURCE: Voprosy virusologii, no. 3, 1966, 371-372

TOPIC TAGS: epidemiology, virology, virus, influenza virus

ABSTRACT:

Of three virus strains isolated from patients in two influenza outbreaks,  
one resembled standard strain PR8 and the other two were identified as new  
type A strains. Their biological and antigenic properties are being  
studied. [W.A. 50; CBE No. 10]

SUB CODE: 06/ SUBM DATE: none/

Card 1/1

L 39943-66  
ACC NR: AP6014683

SOURCE CODE: UR/0108/65/020/012/0034/0042

3 / 3

AUTHOR: Kontorovich, M. I. (Active member); Sokolova, N. O. (Active member)

ORG: Scientific and Technical Society of Radio Engineering and Electrocommunication  
(Nauchno-tehnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Integral equation describing current distribution in a straight-line antenna

SOURCE: Radiotekhnika, v. 20, no. 12, 1965, 34-42

TOPIC TAGS: antenna theory, antenna engineering

ABSTRACT: The validity of the E. Hallen antenna integral equation (N.A.R. Soc. Sci., Upsala, Series 4, vol. 11, 1938) has been repeatedly questioned by Western (IRE Trans., AP-4, no. 3, 1956) and Soviet specialists. This article tries to clarify some points in the development and application of this equation. The current in a straight-line tubular antenna is given by:  $\int_{-l}^{+l} j(\xi) K(x - \xi) d\xi = M \cos kx - i \int_0^x E_{cm}(\xi) \sin k(x - \xi) d\xi$ , where  $K(x - \xi)$  is the kernel. It is usually assumed that:  $\sin k(x - \xi) = \sin kx$ ; then,

Card 1/2

UDC: 621.396

L 39943-66

ACC NR: AP6014683

6

the above equation is reduced to:  $\int_{-l}^{+l} I(t) K(x-t) dt = M \cos kx - l \left( \frac{\pi}{2} \sin kx \right)$ , where:

$$e = \int_{-\frac{l}{2}}^{\frac{l}{2}} E_{cm}(t) dt; \quad 0 < |x| < l.$$

A proof is served that, with the "gap"

(the point of emf application) approaching zero, the effect of currents in the "gap" vanishes. This confirms the validity of the above simplified equation and permits recognizing the integral as improper in the Riemmannian sense. "The authors wish to thank Professor B. V. Braude with whom all principal points of this article were discussed." Orig. art. has: 28 formulas.

SUB CODE: 09 / SUBM DATE: 21Dec64 / ORIG REF: 008 / OTH REF: 003

Card 2/2 HS

KONTOROVICH, M.I.; SOKOLOVA, N.O.

Integral equation describing current distribution in a rectangular antenna. Radiotekhnika 20 no. 12:34-42 D '65 (MIRA 19:1)

1. Deystvitel'nyye chleny Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrorvyazi imeni Popova.

KAVTARADZE, N. N.; SOKOLOVA, N. P.

Infrared spectra of carbon monoxide adsorbed on gold and  
silver at low temperatures. Zhur. fiz. khim. 36 no.12:2804-  
2805 D '62. (MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR.

(Carbon monoxide—Spectra) (Gold) (Silver)

KAVTARADZE, N.N.; SOKOLOVA, N.P.

Adsorption of carbon monoxide on copper and the structure of its  
surface compounds from infrared spectrum data. Dokl. AN SSSR 146  
no.6:1367-1369 0 '62. (MIRA 15:10)

1. Predstavleno akademikom V.I. Spitsynym.  
(Carbon monoxide—Spectra) (Copper)  
(Surface chemistry)

SOKOLOVA, N. P.

✓ Study of the mechanism for the catalytic hydrogenation of organic sulfur compounds on an iron-chromium catalyst by the method of tagged atoms. I. The mechanism of the catalytic hydrogenation of carbon disulfide and thiophene. F. P. Ivanovskii, R. S. Kal'varskaia, G. S. Beskova, and N. P. Sokolova (Inst. Nitrogen Ind., Moscow). *Zhur. Fiz. Khim.* 50, 1860-6 (1976). The catalytic hydrogenation of CS<sub>2</sub> and of thiophene takes place through the formation of intermediate compds. with the catalyst in 2 stages: formation of sulfides and their subsequent reduction. An isotopic exchange between <sup>34</sup>S and CS<sub>2</sub> was observed in the presence of the sulfurized catalyst at 200°. This can be used to introduce S<sup>34</sup> into CS<sub>2</sub>. *J. Rostarouch*

N. P. Sokolova  
Sokolova

7 9  
4 2-1978-1-1E4-1

P/M m

SOKOLOVA, N.P.

*Chem*

Studies of the mechanism of the catalytic hydrogenation of organic sulfide compounds on an iron-chromium catalyst by the method of tagged atoms. II. The study of the isotope exchange reaction. E. P. Ivashovskii, R. S. Kal'var'skaya, G. S. Beskore, and N. P. Sokolova (Inst. Nitrogen Ind., Moscow). *Zhur. Fiz. Khim.* 30, 2363-5 (1956); cf. *C.A.* 51, 7810g. — In the absence of catalysts, the S isotope exchange in  $\text{CS}^{34}\text{-H}_2\text{S}^{34}\text{-N}_2$  proceeds very slowly, and only 5-6% is exchanged at 400° in 3 hrs. The rate of exchange is much higher with Fe-Cr-S<sup>34</sup> catalyst, and CS<sub>2</sub> in N<sub>2</sub> exchanges 20% of S<sup>34</sup> for S<sup>33</sup> at a space velocity of 1200/hr, at 400°, H<sub>2</sub>S<sup>34</sup> under the same reaction conditions 73%, and COS<sup>34</sup> 45% at 300°. The rate is lower at lower temps. C<sub>2</sub>H<sub>2</sub>S<sup>34</sup> is considerably more stable than are other org. S compds., and the S<sup>34</sup> exchange starts at 32° and becomes very rapid at 400°. III. Investigation of sulfided catalysts. *Ibid.* 2555-9. — In a sulfided catalyst most of the S exists as the sulfide S, but catalysis is assumed to progress by way of soln. of S in FeS, with the dissolved S more mobile than the sulfide S. The catalysts were prep'd. by having S<sup>34</sup> either as the dissolved S, or the component of FeS, and the hydrogenation of org. S compds. progressed in the loci of dissolved S in the catalyst. The first catalysis stage, the catalyst reduction, proceeds through the dissolved S. The next stage is the cracking of the org. S-contg. mols. and S deposition on the reduced catalyst sections; the isotope content of the H<sub>2</sub>S formed in the reduction and hydrogenation of the org. S always corresponds to the isotope content of the dissolved S. A correlation seems to exist between the amt. of S dissolved in the FeS solid soln. and its catalytic activity, which points to the desirability of studying various metal-S systems, which form solid solns., in the search for active catalysts for the hydrogenation of org. S compds. W. M. Sternberg

*Chem*

*PM 1 AM*

IVANOVSKIY, F.P.; KAL'VARSKAYA, R.S.; BESKOVA, G.S.; SOKOLOVA, N.P.

Tracer studies on the mechanism of the catalytic hydrogenation of  
organic sulfur compounds on an iron-chromium catalyst. Zhur. fiz.  
khim. 30 no.11:2555-2559 N '56. (MIRA 10:4)

1. Institut azotnoy promyshlennosti, Moskva.  
(Sulfur organic compounds) (Hydration)

5(4)

AUTHORS: Balandin, A. A., Sokolova, N. P. SOV/62-59-2-5/40

TITLE: On Catalytic Properties of Tungsten Bronzes (O kataliticheskikh svoystvakh vol'framovykh bronz)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 2, pp 214-224 (USSR)

ABSTRACT: In the present paper an attempt was made to clarify the problem of the catalytic activity of tungsten bronzes. The catalytic properties of Na-W-bronzes were investigated in comparison with the corresponding activity of tungsten anhydride and para tungstate. It could be found that the Na-W-bronzes are catalytically little active compounds. Bronzes catalyze the dehydration of isopropyl alcohol and with small yield only the decomposition of ethyl alcohol. Formic acid is mainly dehydrated and partly dehydrogenated. With regard to the dehydrogenation of cyclohexane and piperidine, to the reduction of nitrobenzene and to the oxidation of toluene the Na-W-bronzes are catalytically passive. The catalytic activity of bronzes is less than the corresponding activity of  $WO_3$  and tungstate. It decreases on the transition of bronze to bronze according to the degree of its reduction and

Card 1/3

On Catalytic Properties of Tungsten Bronzes

SOV/62-59-2-5/40

also on addition of lithium. Some parallelism was found between the catalytic activity and the degree of lattice defects of bronzes. This is in accordance with the electron theory of the catalysis (Refs 13,30) the small catalytic activity of the lattice defects is, however, on the other hand in contradiction to this theory. Though the lattice defects support catalysis, they are by no means the only prerequisite for the catalytic activity. In addition to the defects also steric and energetic relations will have to be considered. The X-ray structure analysis was carried out by Yu. P. Simanov in the X-ray Laboratory of the Chemistry Department of the MGU, the adsorption analysis by A. Ye. Agronomov, holding the Chair of Organic Catalysis MGU. Electron diffraction studies were performed by M. I. Dashevskiy in the laboratory of A. M. Rubinshteyn in the IOKh AS, USSR. The authors expressed their gratitude to them. There are 2 figures, 6 tables, and 30 references, 12 of which are Soviet.

ASSOCIATION:

Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskogo of the Academy of Sciences, USSR)

Card 2/3

5(2)

SOV/62-59-5-39/40

AUTHORS: Balandin, A. A., Sokolova, N. P.

TITLE: Letters to the Editor (*Pis'ma redaktoru*). On the Condensing Properties of Niobium- and Tantalum-oxides (O kondensiruyushchikh svoystvakh okislov niobiya i tantala)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 949 - 950 (USSR)

ABSTRACT: In the course of the further development of an investigation dealt with by an earlier paper (Ref 1), the present paper investigates the ability of niobium- and tantalum oxides of catalyzing the condensation reaction on the basis of the example of the formation of croton aldehydes from acetaldehyde in the vaporous phase. It was found that both the Nb- and the Ta-oxides, in contrast to  $\text{Al}_2\text{O}_3$ -catalysts, act as selective condensation catalysts. The investigations were carried out by means of a continuous-flow apparatus. With a rate of flow of the acetaldehyde passing through of 0.10-0.15 ml/min and at a temperature of 336-340° a maximum yield of croton aldehyde was obtained. As catalysts the Nb- and Ta-oxides were used in pure form, singly, and in form of a mixture of both asbestos and carbon and with the addition of acid and basic substances such as  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{CaO}$

Card 1/2

Letters to the Editor. On the Condensing Properties of SOV/62-59-5-39/40  
Niobium- and Tantalum-oxides

and BaO. The manner in which the catalyst is produced influences its catalyzing ability considerably. The highest degree of activity was found in  $\text{Nb}_2\text{O}_5$  on asbestos, which had been produced from the oxalate complex of niobium ( $1 \text{Nb}_2\text{O}_5 : 2\text{H}_2\text{C}_2\text{O}_4$ ). The croton aldehyde yield amounted to 30% of the acetaldehyde allowed to pass through. The data of the croton aldehyde obtained are: boiling point  $102.5-104^\circ$ ,  $n_D^{20}$  1.4370. There is 1 Soviet reference.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskogo of the Academy of Sciences, USSR)

SUBMITTED: March 14, 1959

Card 2/2